

ABSTRACT OF THE INVENTION

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An integrated multimedia system has a multimedia processor disposed in an integrated circuit. The system comprises a first host processor system which is coupled to the multimedia processor. A second local processor is disposed within the multimedia processor which controls the operation of the multimedia processor. A data transfer switch is disposed within the multimedia processor and coupled to the second processor which transfers data to various modules of the multimedia processor. A fixed function unit is disposed within the multimedia processor, coupled to the second processor and the data transfer switch and configured to perform three dimensional graphic operations.

A data streamer is coupled to the data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within the multimedia processor in accordance with the corresponding channel allocations. An interface unit is coupled to the data streamer and has a plurality of input/output (I/O) device driver units. A multiplexer is coupled to the interface unit and provides access between a selected number of I/O device driver units and external I/O devices via output pins. A plurality of external I/O devices are coupled to the multimedia processor.